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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,653	12/28/2000	James A. Jackson JR.	VAL-501-A	6984

7590

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EXAMINER

LUU, THANH X

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,653

Applicant(s)

JACKSON, JAMES A.

Examiner

Thanh X Luu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 20, 2002 has been entered.

Claims 1-7 and 9-20 are currently pending.

Oath/Declaration

2. The substitute Oath/Declaration filed August 14, 2002 is approved.

Drawings

3. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 2, 4-7, 9, 11, 12 and 15-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in

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such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 1, 2, 4-7, 9, 11, 12 and 15-20, Applicant asserts (on page 6 of Applicant's response filed December 20, 2002), "the term 'dark' is not used in the claim or in the application as defining the lighting conditions in which the pixel exists."

Examiner cites Ueno (U.S. Patent 5,214,272), which defines a conventional dark pixel in terms of lighting conditions in which the pixel exists. More specifically, Ueno describes (see column 1) a dark pixel as a pixel where the lighting conditions are shielded from the pixel. Since, Applicant has denied that a "dark" pixel is defined by the lighting conditions, it is unclear to one of ordinary skill in the art what a "dark pixel" is. That is, what is the difference between a "dark" pixel and a standard pixel. There appears to be no structural or functional difference between a "dark" pixel and a standard pixel. Figure 6 simply distinguishes the "dark" pixels from standard pixels with crosshatches. Page 5 of the specification, lines 1-4 mentions a signal from the "dark" pixel, but does not describe how it functions. Thus, it is unclear to one of ordinary skill in the art how to make and use the invention.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 2, 4-7, 9, 11, 12 and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 2, 4-7, 9, 11, 12 and 15-20, it is unclear in its given context what a "dark" pixel is as set forth above. For purposes of examination, Examiner understands a dark pixel as a pixel having a shielding layer as defined in Ueno.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michenfelder et al. (U.S. Patent 6,376,824).

Regarding claims 3 and 13, Michenfelder et al. disclose (see Figure 9) an optical moisture detector for measuring ambient light conditions, comprising: an optical moisture sensor (16, 20) for sensing the presence of moisture on a moisture collecting surface, the sensor operable to emit a signal corresponding to sensed conditions; processor means (see column 6, line 12, evaluation circuit) for receiving the signal, for determining an absolute ambient light value corresponding to existing ambient light conditions; and timer means (see Figure 9; clock signal 15) for selectively disabling (see also column 6, lines 1-15) the processor means for a predetermined period of time. Michenfelder et al. do not specifically disclose comparing the signal to a predetermined value. However, Michenfelder et al. teach (see column 6, lines 12-15) making a decision based on the sensor signal to operate a wiper or a light system. Further, it is notoriously well known in the art to compare a sensor signal and based on the result

(either greater or less than a predetermined value) to make a decision and output a control signal. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to compare the value to a predetermined value as claimed in the apparatus of Michenfelder et al. to provide a simple and cost effective way to process a signal.

10. Claims 3, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bos et al. in view of Turnbull et al. (U.S. Patent 6,465,963).

Regarding claims 3 and 13, Bos et al. disclose (see Figure 6) an optical moisture detector and method for measuring ambient light conditions comprising: an optical moisture sensor (36) for sensing the presence of moisture on a moisture collecting surface, the sensor operable to emit a signal corresponding to sensed conditions; and a processor means (42, 54) for receiving the signal, for determining from the signal an absolute ambient light value corresponding to existing ambient light conditions, for comparing the value of to a predetermined value (threshold), and for emitting a control signal (below threshold) if the value is less than the predetermined value as a result of the comparison. Bos et al. do not specifically disclose a timer means to disable the processor means from comparing as claimed. Turnbull et al. teach (see Figure 9A) a timer means (312) for selectively disabling the processor means from comparing (step 306) to a predetermined value for a predetermined period of time. Turnbull et al. further recognize (see column 17, lines 15-20) that such a disabling of the processor means from comparing allows the processor means to do other important tasks of the system. Thus, it would have been obvious to a person of ordinary skill in the art at the time the

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invention was made to provide a timer means as claimed in the apparatus of Bos et al. in view of Turnbull et al. to provide a more efficient system by freeing the processor means for other processing tasks.

Regarding claim 10, Bos et al. disclose the claimed invention as set forth above. Bos et al. do not specifically disclose comparing the ambient light value to two predetermined values as claimed. Turnbull et al. teach (see claims 2 and 4) comparing an ambient light value to a first predetermined value to turn on a light and comparing the ambient light value to a second predetermined value to turn off a light. Thus, Turnbull et al. allow for more flexibility in controlling when to turn on and off a light. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a comparison scheme in the apparatus of Bos et al. in view of Turnbull et al. to reduce sudden lighting changes and allow for more flexibility in operating a light.

11. Claims 1, 2, 4-7, 9-12 and 15-20, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bos et al. in view of Ueno (U.S. Patent 5,214,272).

Regarding claims 1, 2, 4-7, 9, 11, 12 and 15-20, Bos et al. disclose (see Figure 6) an optical moisture detector and method for measuring ambient light conditions comprising: an optical moisture sensor (36) for sensing the presence of moisture on a moisture collecting surface, the sensor operable to emit a signal corresponding to sensed conditions; and a processor means (42, 54) for receiving the signal, for determining from the signal an absolute ambient light value corresponding to existing ambient light conditions, for comparing the value of to a predetermined value (threshold), and for emitting a control signal (below threshold) if the value is less than

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the predetermined value as a result of the comparison. Bos et al. further disclose (see Figure 6) means responsive to the control signal for controlling (55) a light generating device (38). Bos et al. also disclose (see Figure 2b) the optical moisture sensor mounted with respect to a windshield of a motor vehicle. Furthermore, Bos et al. disclose (see Figure 7) an algorithm in which the sensor operates. A microprocessor is inherently operating the device in accordance with the algorithm since the method is carried out automatically. Bos et al. further disclose (see column 4, lines 47-48) a CCD or CMOS imaging array. Lastly, Bos et al. further disclose (see Figure 7) comparing (230, 330) to a first and second threshold value for turning "on" and "off" a light generating device. Bos et al. do not specifically disclose the sensor having a plurality of dark pixels. Ueno teaches (see column 1, lines 40-45) a sensor having a dark pixel and a plurality of standard pixels. Ueno further teaches that a sensor more accurately detects a scene by including a dark pixel to compensate for noise. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a plurality of dark pixels in the sensor of Bos et al. to more accurately detect the amount of light in the scene.

12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bos et al. in view of Marguinaud et al. (U.S. Patent 4,412,181).

Regarding claim 14, Bos et al. disclose the claimed invention as set forth above. Bos et al. do not specifically disclose successively comparing the ambient light value as claimed. Marguinaud et al. teach (see column 6, lines 36-40) successively comparing a value and to emit a control signal only if the value is less than a predetermined value.

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Thus, Marguinaud et al. recognize that successive comparison verify that a value is relatively constant. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide successive comparison in the apparatus of Bos et al. in view of Marguinaud et al. to ensure that the ambient light value is constant and, thereby improve control of the system.

Response to Arguments

13. Applicant's arguments with respect to claims 1-7 and 9-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is (703) 305-0539. The examiner can normally be reached on Monday-Friday from 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta, can be reached on (703) 308-4852. The fax phone number for the organization where the application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

txl
March 19, 2003


Thanh X. Luu
Patent Examiner